



3.6 Perform Railcar Product Transfers

Performance-Based Skills Assessment

2019



Section One Identify Personal Protective Equipment (PPE) and Hazards Associated with Propane Transfer Operations

Task 1 Identify Personal Protective Equipment (PPE) and Hazards Associated with Propane Transfer Operations

Section Two Verify Railcar Spotting Procedures and Documentation and Determine Railcar Condition Prior to Accepting Delivery

Task 1 Verify Railcar Spotting Procedures
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Section Three Verify the Presence of Odorant

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NOTICE: The Skills Evaluator must be the Candidate's supervisor or another qualified person who has completed CETP 3.6 "Perform Railcar Product Transfers" or is familiar with the subject matter.

CETP Certification requires that the employee seeking certification cannot act as his/her own evaluator.

Instructions for Use:

The Performance Based Skill Assessment Evaluation is designed to standardize conditions under which the candidate demonstrates performance of tasks to meet the requirements for NPGA CETP Certification.

The Skills Assessment should be supplemented with company policies and procedures related to each task being evaluated as needed.

1. The candidate has 12 months from the date of successfully passing the CETP Certification exam to train and successfully complete the tasks within the evaluation.
2. The affidavits and a final checklist are provided on the last two pages of the skills packet.
 - Affidavits must be signed by both the candidate and the skill evaluator
 - The final checklist must be fully completed within 12 months of passing the exam (Candidates may use this time to practice skills as often as necessary)
 - Make a copy for the training records when the skills assessment is completed for future audits
 - Send the affidavit page and final checklist (last two pages) to the testing center within 12 months of passing the exam
3. All requirements and prerequisites must be met before certification will be granted.

3.6 Performing Railcar Product Transfers Certification Requirements

- Passing exam score on *3.6 Performing Railcar Product Transfers* exam
- Completed and signed *3.6 Performing Railcar Product Transfers* Skills Assessment returned to the testing center within 12 months of passing the exam
- *1.0 Basic Principles and Practices of Propane certification* completed within 12 months of passing the exam

Users of this material should consult the law of their individual jurisdictions for codes, standards and legal requirements applicable to them. This material is not intended to be an exhaustive treatment of the subject, and should not be interpreted as precluding other procedures that would enhance safe LP-gas operations. This training material merely suggests methods the user may find useful in implementing applicable codes, standards, and legal requirements. This publication is not intended nor should it be construed to (1) set forth procedures which are the general custom or practice in the propane industry; (2) to establish the legal standards of care owed by propane distributors to their customers; or (3) to prevent the reader from using different methods to implement applicable codes, standards or legal requirements. This material was designed to be used as a resource only to assist expert and experienced supervisors and managers in training personnel in their organizations and does not replace federal, state, local, or company safety rules. The user of this material is solely responsible for the method of implementation. The Propane Education and Research Council, the National Propane Gas Association and Industrial Training Services, Inc. assume no liability for reliance on the contents of this training material.

Issuance of this material is not intended to nor should it be construed as an undertaking to perform services on behalf of any party either for their protection or for the protection of third parties.

Instructions for Candidate:

Practice the operations as many times as needed to become confident and proficient with the documents or equipment necessary to complete each task. Your evaluator will check and observe your performance, using the steps to complete each hands-on operation and/or company procedures.

The candidate must adhere to all safety precautions. If a safety precaution is violated, then the demonstration shall be stopped and the skills evaluator must instruct the candidate on the proper safety procedures that apply before allowing the candidate to continue.

After completing the skills evaluation, the candidate must fill out the Employee Information section and sign the Affidavit.

Required information includes the candidate's last four digits of the SSN to assist the testing center in locating the correct records.

Instructions to the Skills Evaluator:

The candidate must adhere to all safety precautions. If a safety precaution is violated, then the demonstration shall be stopped and the skills evaluator must instruct the candidate on the proper safety procedures that apply before allowing the candidate to continue.

- Review the tasks within the Skills Evaluation with the candidate.
- Review all of the instructions, answering any questions and explaining how the skills assessment will be used.
- Demonstrate and/or talk the candidate through each of the steps required to perform each task.
- Allow the candidate time to ask questions and/or study the steps.
- Observe the candidate performing the required steps, providing corrections as needed
- Allow the candidate to practice until he/she is confident. *Remember:* the candidate has 12 months from the date of passing the exam to complete and return the skills assessment
- Evaluate the candidate when ready
- After completing the final checklist, complete the Skills Evaluator information and sign the affidavit.
- Ensure that the Affidavit and final Checklist are copied for the Employee Training Records and then sent to the testing center.

Each task is divided into one or more operations upon which the candidate's performance is evaluated. All tasks must be completed unless the "Not Applicable" option is both available for the task and applicable to the candidate or the marketer's present situation.

Satisfactory - When all the operations within a task are successfully performed by the candidate according to the criteria provided, the evaluator will check off the box marked "Satisfactory."

* **Not Applicable** – Certain tasks have the “Not Applicable” option available. The Skills Evaluator must ensure the circumstances described under the option are applicable to either the candidate or marketer’s present situation.

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Section One: Identify Personal Protective Equipment (PPE) and Hazards Associated with Propane Transfer Operations

Task 1: Identify Personal Protective Equipment (PPE) and Hazards Associated with Propane Transfer Operations

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) for the skills assessment task evaluation:

1. Identify examples of possible hazards associated with propane transfer operations in the following categories:
 - Chemical hazards
 - Electrical hazards
 - Mechanical hazards
 - Temperature hazards
2. Explain company policy and procedures for the use of Personal Protective Equipment (PPE) throughout the propane transfer operation and provide examples in the following categories:
 - Eye protection
 - Hand protection
 - Foot protection
 - Head protection
 - Hearing protection
 - Fall protection
 - Work clothing protection

Satisfactory

Section Two: Verify Railcar Spotting Procedures and Documentation and Determine Railcar Conditions Prior to Accepting Delivery

Task 1: Verify Railcar Spotting Procedures

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) for the skills assessment task evaluation:

1. Verify the railcar is correctly positioned at the unloading riser by the railroad train crew.
2. Ensure the following steps are properly completed:
 - Brakes are fully set
 - Check the handwheel at the end of the tank to ensure it is turned to the right as far as it will go
3. Ensure chock blocks are placed in front and behind one set of wheels of the tank car.
4. Verify all appropriate caution sign requirements are met, ensuring the signs are:
 - Marked, colored and sized as per required specifications
 - Placed between the rails, at least one car length away from the car being worked on
 - Caution sign language is facing the direction(s) of any open end to the work being performed (Multiple open directions of exposure = multiple signs needed)
5. Ensure the derail is properly set to the derailing position, following manufacturer instructions and company policies and procedures.

Satisfactory

Task 2: Verify Railcar Documentation

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Validate railcar documentation by verifying the presence of a bill of lading, shipping papers and railcar release forms
2. Examine the railcar bill of lading, verifying the following:
 - Shipping name – verify propane in the railcar
 - Railcar – verify same as identified on bill of lading
 - Railcar contents specific gravity – verify it is within acceptable range for propane
 - Company the cargo is consigned to – verify for accuracy on bill of lading

Satisfactory

Task 3: Determine Railcar Condition Prior to Accepting Delivery

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and use company documents for the skills assessment task evaluation:

1. Review the bill of lading and walk completely around the railcar to inspect and verify condition prior to accepting delivery according to company policies and procedures, to include the following:
 - Inspect the general condition of the tank exterior, checking the tank and head shields for structural damage. If any significant damage or leaks are found, immediately notify supervisor
 - Inspect the safety features such as hand brakes, running boards and handrails
 - Check the tank for correct "Propane" or Liquefied Petroleum Gas" markings
 - Ensure required placards and holders are on both sides and ends of the tank
 - Check the tank identification number to ensure it matches the number shown on the bill of lading
 - Ensure the tank information contains an approved DOT design code for tank cars
 - Ensure platform crossing over to the railcar is correctly placed per manufacturer and company policies and procedures
 - Using suitable fall protection, examine the seal on the dome lid for evidence of tampering and verify the seal against the bill of lading. If none is evident, clip seal and retain for documentation. *If tampering is evident, immediately contact supervisor.*
 - Ensure there are no sources of ignition prior to opening the dome
 - Open the dome and inspect the valving inside the dome for leaks, damage or missing parts
 - Ensure all fittings are tightly plugged and that valves, operators, and gauges are free from damage that would create a hazard during the unloading process
 - Document findings on company documents and immediately notify the facility supervisor or manager if any abnormal condition is found according to company policies and procedures

Satisfactory

Section Three: Verify the Presence of Propane Odorant

Task 1: Perform a Sniff Test to Verify the Presence of Propane Odorant

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Identify the regulations pertaining to verifying the presence of propane odorant.
2. Wear appropriate PPE as required by company policies and procedures
3. Identify the appropriate sampling valve on the railcar where a liquid product sample is obtained to determine the presence of odorant.
4. Perform and document a sniff test according to company policies and procedures.
5. Explain company policies and procedure if it is suspected that propane is NOT properly odorized.

Satisfactory

Section Four: Identify Bulk Plant Railcar Unloading and Loading Systems

Task 1: Identify Equipment Used to Transfer Liquid by Differential Pressure

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) for the skills assessment task evaluation:

1. Correctly explain the concept of "tank differential pressure" and why it is necessary to the transfer process.
2. Identify the following:
 - Plant piping circuits to and from the liquid transfer pumps
 - Plant piping circuits to and from the vapor compressor
3. Identify following flow controlling valves, as applicable, and inspect them for defects.
 - Ball valve
 - Globe valve
 - Pump bypass valve
 - Railcar Emergency Shutoff Valve

Continued

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Task 1 continued

4. Inspect the plant transfer hoses for defects, to include the following:
 - Hoses
 - Hose couplings
 - Hose clamps and fittings
 - Connections at bulkhead fittings
 - Coupling sealing ring or gasket on the cargo tank or male bulkhead coupling, as applicable
5. Inspect transfers hoses to ensure they are free of hose-rejection defects and are in good operating condition, to include:
 - Damage to the hose cover that exposes the reinforcement
 - Wire braid reinforcement that is kinked or flattened so as to permanently deform the wire braid
 - Soft spots when not under pressure, bulging under pressure, or a loose outer covering
 - Damaged, slipping, or excessively worn hose couplings
 - Loose or missing bolts or fastenings on bolted hose coupling assemblies
6. Inspect the ACME threads on the hose end adapter and tank car connection for excessive wear; replacing as needed before proceeding
7. Inspect and verify the railcar riser is in good repair and free of environmental contaminants.
8. *If using a portable transfer unit:* inspect all hoses, hose fittings and connections, ESVs, and walking surfaces to ensure all comply with regulations, are in proper working order, and free of damage before proceeding with the transfer operations.

Satisfactory

Task 2: Identify Emergency Equipment and Procedures

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Correctly identify company policies and procedures relating to the site Emergency Action Plan (EAP).
2. Verify the following for transfer site fire extinguishers:
 - Location
 - Ensure they are in proper working order
 - Explain the correct use of the transfer site fire extinguisher
3. Explain the correct procedures for notifying plant personnel of any emergency.
4. Identify the site evacuation routes and explain evacuation procedures for each route.
5. Identify the following for the emergency shutdown systems:
 - Shutdown locations and the devices they control
 - How to work the shutdown system
 - Evacuation routes from the transfer area
6. Inspect all applicable emergency equipment and devices to ensure they are in proper working condition.

Satisfactory

Section Five: Unload the Railcar

Task 1: Prepare the Railcar for Unloading

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Ensure the following safety precautions are met at all times during the transfer process, to include:
 - All sources of ignition (except those necessary for the transfer operation) are removed from the area prior to beginning the transfer operation
 - A fire extinguisher (minimum 18-pound B: C or A: B: C) is accessible to the operator and within the transfer area at all times
 - Employees wear appropriate PPE during the transfer process
 - Demonstrate the correct method to carry a hose connector; hose end valve; and other valves at all times
 - Explain the requirements for a qualified person remaining in attendance at all times during the transfer operation
2. Ensure the railcar is properly spotted:
 - Railcar wheels are properly chocked
 - Railcar handbrakes are set
 - Deraillor is set to the derailling position
 - Railcar and spur entrance(s) are marked with required cautionary signs

Continued

Task 1 continued

3. Inspect the railcar to verify product identity and quality prior to making hose connections.
4. Inspect the railcar for obvious mechanical defects, damage, or a defect card found on the car *that would be cause not to unload*
5. Demonstrate correct understanding of railcar unloading safety precautions, to include:
 - Not standing or placing any body part directly above the slip tube (gauge rod) when using it
 - Not standing or placing any body part directly above or in front of any valves, to include the pressure relief valve, product transfer valve or, any fittings or closures
 - Use extreme care while working around the railcar sampling valve, outage gauge, and relief valve
 - Use care while working around the coupler vertical restraint system
 - Activate the emergency shutdown system in the event of a leak, *if it is safe to do so*
 - Any additional company safety and operating policies and procedures related to railcar unloading
6. Inspect the tank car, to ensure:
 - Most recent periodic inspection dates for the railcar and pressure relief devices are within due dates stenciled on the railcar. *A railcar overdue for inspection may not be unloaded.*
 - Tank car has appropriate, legible markings
 - Air brake equipment is in good, working order
 - Coupler vertical restraint system is present on the car
 - Tank car thermal protection is in good repair
 - Tank shell and heads are free of abrasions, corrosions, cracks, dents, distortions, defects in welds, or any condition making the tank car unsafe for transportation
 - Piping, valves, fittings and gaskets are free of corrosion, damage, or any other condition that makes the tank car unsafe for transportation
 - All valves are closed and the plugs present
7. Conduct and document a sniff test and gauge the contents of the railcar according to company policies and procedures
8. Identify and check the following installed inside the dome and provide a brief description of the purpose for each:
 - Liquid and Vapor Connections
 - Thermometer Well
 - Sampling valve
 - Pressure Relief Valves
 - Magnetic Gauging Device

Satisfactory

Task 2: Unload the Railcar

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Correctly explain DOT requirements for a qualified a person in attendance
2. Explain the following abnormal conditions that would prevent the unloading of the contents of a railcar:
 - Anhydrous Ammonia Contamination
 - Water Contamination
 - Lack of Odorant or non-Propane Odor
 - Abnormal Pressure
3. Determine the maximum amount of propane that can be transferred to the plant bulk storage tanks:
 - Gauge the contents of the plant storage tank with the rotary or float gauge installed in the tank head and document results according to company procedures
 - Subtract the gauge reading from the maximum permitted filling level according to company procedures
 - Calculate the maximum amount of propane that can be added to the storage tank according to company procedures
 - Notify supervisor if there is more propane in the railcar than the storage tank(s) will safely hold
4. Connect to the railcar for unloading:
 - Check the manual shutoff valves on the railcar liquid and vapor connections to ensure they are fully closed and then slowly loosen the plugs
 - Install unloading stubs or ESVs in the liquid and vapors valves according to company procedures
 - Remove the dust caps from the connectors on the riser hoses, checking the connectors to ensure they are clean
 - Check the O-rings on the ESV or unloading stub to ensure they are in good condition, cleaning connections as necessary and replacing worn, flattened or damaged O-rings as necessary
 - Connect the hoses to the railcar stubs or ESVs by spinning on the ACME connectors until they are hand tight, and then tighten with a spanner wrench
 - Open the ESVs at the riser and test the connections for leaks
 - Check each connection for leaks by opening and closing the manual shutoff valve at the railcar to charge the connection with propane
 - Ensure the remote emergency shutdowns across the system are working properly, stopping the transfer operation if they are not, and notifying the supervisor
 - Complete all final connections and checks for proper operation according to company procedures

Continued
Task 2 continued

5. Begin the unloading process according to company policies and procedures, to include:
 - Slowly open the vapor valves at the riser, then open all valves in the liquid line, starting at the manual shutoff valves on the railcar and working toward the plant storage tank(s).
 - Ensure the four-way valve and the plant valves are set so the vapor compressor will remove vapor from the plant storage tank and discharge it into the railcar
 - Start the vapor compressor and check the pressure gauges for excessively high exhaust or excessively low intake pressure, stopping the compressor to correct the problem if either occurs before continuing. Check the site glass or flow indicator to ensure liquid is flowing through the system.
 - Stop the compressor if an abnormal situation occurs, following company policies and procedures to correct the problem
 - Remain in attendance throughout the unloading procedure, monitoring the compressor, receiving tanks and railcar connections
 - Close all valves in the liquid line and stop the compressor when the plant storage tank(s) reaches its maximum permitted filling capacity or when the railcar is empty, whichever is first to occur, according to company policies and procedures.
6. Begin the vapor recovery process according to company policies and procedures, to include:
 - Verify all liquid is removed from the railcar by using the sight glass, flow indicator or other means
 - Rotate the four-way valve 90 degrees so the compressor draws vapor from the railcar and discharges it into the storage tank
 - Route the vapor compressor's discharge back to the storage tank's liquid space to help prevent excessive pressure rise in the storage tanks
 - Close the liquid line valve. Ensure valves are properly set to allow the compressor to withdraw vapor from the top of the railcar, compress it, and discharge it into the liquid section of storage tank
 - Remain in attendance throughout the vapor recovery process, monitoring the compressor, receiving tanks and the railcar connections
 - Close all valves in the vapor line and shut down the compressor at the end of the vapor recovery operation according to company policies and procedures.
 - Complete all designated inventory records and/or documentation as per company policies and procedures.

Satisfactory

Task 3: Prepare the Railcar for Return

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Open the sampling valve to determine if the railcar is fully unloaded of liquid LP-gas.
 - If vapor is released, the railcar is totally unloaded
 - If liquid escapes, the railcar may not be fully unloaded. Resume unloading operations until the railcar is fully unloaded.
2. Close all railcar discharge valves, ESVs and transfer hose-end valves
3. Vent the propane trapped between valves, stubs and hose couplings, ensuring any propane trapped in the connections bleeds off.
4. When the connections are fully de-pressurized, disconnect the transfer hoses.
5. Remove the railcar unloading nipples, or "stubs," or ESVs that are screwed into the railcar valve outlets
6. Replace all railcar caps or plugs and ensure they are wrench tight.
7. Explain significant violation/fines to company for a loose cap or plug.
8. Close and secure the dome.
9. Secure the remaining equipment according to company policies and procedures.

Satisfactory

Task 4: Prepare Post-Unloading and Releasing Procedures

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Complete Post Unloading and Releasing Procedures:
 - Complete a "Bad Order Tag" as necessary for any defects found during unloading procedure
 - Remove and store the warning signs and chock blocks, and reset the derailer or other control device
 - Verify that all placards are in place and in good condition, without fading or deterioration
 - Verify railcar and unloading site are safe and secure

Continued

Task 4 continued

2. Complete the Railcar Return Instructions and submit the form online to the carrier or deliver the form to rail carrier representative as per DOT requirements, *as applicable*:
 - Verify the following dates: notification of railcar arrival, date received on the siding, and date unloading was completed
 - Company Copy: enter the date when the car was removed from the siding. (Retain for company records)
 - List defects present when the car was received, if any. *If defects are present*: determine if defect(s) were discovered or occurred during the time the railcar was on the siding and being unloading. *If yes*, describe in remarks section and attach a copy to the "Bad Order Tag"
 - Verify other information preprinted on the form, sign and date, *as applicable*
 - Deliver the Railcar Return Instructions, personally or by electronic means, to the railroad agent for his/her signature and date according to company policies and procedures, *if applicable*

Satisfactory * **Not Applicable**

**Not Applicable means that the person's job description does not require the person to perform this task*

Section Six: Load the Railcar

Task 1: Prepare to Load the Railcar

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Ensure the following safety precautions are met at all times during the transfer process including the following:
 - All sources of ignition (except those necessary for the transfer operation) are removed from the area prior to beginning the transfer operation
 - A fire extinguisher (minimum 18-pound B: C or A: B: C) is accessible to the operator and within the transfer area at all times
 - Employees wear appropriate PPE during the transfer process
 - Demonstrate the correct method to carry a hose connector; hose end valve; and other valves at all times
 - Explain the requirements for remaining in attendance at all times during the transfer operation
2. Ensure the railcar is properly spotted:
 - Railcar wheels are properly chocked
 - Railcar handbrakes are set
 - Deraillor is set to the derailling position
 - Railcar and spur entrance(s) are marked with required cautionary signs
3. Verify tank car contains propane and is same as shown on bill of lading prior to making hose connections.
4. Inspect the railcar for obvious mechanical defects, damage, or a defect card found on the car *that would be cause not to load*
5. Demonstrate correct understanding of railcar loading safety precautions, to include:
 - Not standing or placing any body part directly above the slip tube (gauge rod) while using it
 - Not standing or placing any body part directly above or in front of any valves, to include the pressure relief valve, product transfer valve, all fittings or closures
 - Using care while working around the coupler vertical restraint system
 - Activating the emergency shutdown system in the event of a leak, *if it is safe to do so*
 - Any additional company safety and operating policies and procedures related to railcar loading
6. Inspect the tank car, to include:
 - Most recent periodic inspection dates for the railcar and pressure relief devices are within due dates stenciled on the railcar. *A railcar overdue for inspection may not be loaded.*
 - Tank car has appropriate, legible markings
 - Air brake equipment is in good, working order
 - Coupler vertical restraint system is present on the car
 - Tank car thermal protection is in good repair
 - Tank shell and heads are free of abrasions, corrosions, cracks, dents, distortions, defects in welds, or any condition making the tank car unsafe for transportation
 - Piping, valves, fittings and gaskets are free of corrosion, damage, or any other condition that makes the tank car unsafe for transportation
 - All valves are closed and the plugs present
7. Conduct and document a sniff test and gauge the contents of the railcar according to according to company policies and procedures

Satisfactory * **Not Applicable**

Not Applicable means that the person's job description does not require the person to perform this task **or the company does not load railcars.*

Task 2: Load the Railcar

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

Evaluator: Indicate which method was utilized to load the railcar: Pump Vapor Compressor

1. Correctly explain DOT requirements for a qualified a person in attendance
2. Determine the maximum amount of propane that can be transferred to the railcar according to company policies and procedures:
 - Determine the maximum permitted filling level percentage for the railcar based on company policy
 - Multiply the maximum permitted filling level percentage by the total water capacity of the railcar
3. Connect to the Railcar for Loading
 - Check the manual shutoff valves on the railcar liquid and vapor connections to ensure they are fully closed, and then slowly loosen the plugs. Propane may vent around the plug threads for a short time. Wear appropriate PPE throughout the operations and keep face and other parts of the body away from the valve opening. If propane continues to vent around the plug threads, the manual shutoff may be faulty. Retighten the plug and notify the supervisor. If the chains on the plugs are broken or missing, store the plugs in a safe place.
 - Install railroad tank car loading stubs or emergency shutoff valves (ESVs) in the liquid and vapor valves. Thread the ESVs into the valve openings until they are hand tight and then tighten with appropriate wrench.
 - Remove dust caps from the connectors on the riser hoses and check the connectors to ensure they are clean.
 - Check the O-rings on the ESV or stub to ensure they are in good condition, cleaning and replacing as necessary
 - Connect the hoses to the railcar stubs or ESVs by spinning on the ACME connectors until they are hand tight and then tighten with a spanner wrench
 - Open the ESVs at the riser and test the connections for leaks. Ensure the remote emergency shut-downs across the system are working properly. If the ESVs do not operate properly, do not continue the transfer operation and contact your supervisor.

Caution: Some railcar orders require ethyl mercaptan (odorant) be added. Refer to company policies and procedures to meet DOT requirements.

4. **Load the railcar:** **Evaluator: Indicate which method is used:** Pump Vapor Compressor

With a pump, if applicable:

- Open the vapor valves at the riser and then open all valves at the liquid line, starting at the manual shutoff valves on the plant storage tanks and working toward the railcar
- Allow the pressure to equalize and transfer as much liquid as possible, and then open the remaining valves in the vapor line.
Note: If your facility both unloads and loads railcars, it is important to verify that product is flowing in the right direction for the procedure. Ensure that product is not back-flowing into the wrong container. Open valves slowly to prevent excess flow valves from slugging according to company policies and procedures.
- Start the pump, checking the sight glass or flow indicator to ensure liquid is flowing in the correct direction through the system.
Caution: If there is not enough propane in the source tanks(s) to completely fill the railcar, be alert to the pump operation so the transfer process is stopped before the pump runs dry.
- Monitor the magnetic gauging device on the railcar carefully to prevent overfilling

With a vapor compressor, if applicable:

- Check each connection for leaks by opening and closing the manual shutoff valve at the railcar to charge the connection with propane
- Open the vapor valves at the riser and then open all valves at the liquid line, starting at the manual shutoff valves on the plant storage tanks and working toward the railcar. **Note:** liquid may start to flow freely and begin to fill the tanks because of existing differential pressure. If your facility both unloads and loads railcars, it is important to verify that product is flowing in the right direction for the procedure. Ensure that product is not back-flowing into the wrong container.
- Open valves slowly to prevent excess flow valves from slugging according to company policies and procedures
- Check to ensure the four-way valve and the plant valves have been set so the compressor will remove vapor from the railcar and discharge it into the supply container, verifying all valve positions and plant operating procedures.
- Start the compressor and check the pressure gauges for excessively high exhaust or excessively low intake pressure. Stop the compressor and correct the problem if either occurs.
- Check the sight glass or flow indicator to ensure liquid is flowing through the system
- Monitor the magnetic gauging device on the railcar carefully to prevent overfilling
- Close all valves in the liquid level line and stop the compressor when the railcar reaches its maximum permitted filling level or plant storage tank is empty

Continued

Task 2 continued

5. Finish loading the railcar and prepare the railcar for shipping:

- Carefully check the magnetic gauging device often to ensure the railcar is loading properly and not overfilling
- When the railcar tank reaches its maximum permitted filling level, stop the pump and close all valves in the liquid line. *If the tank car is overfilled, contact supervisor to immediately offload to the maximum permitted filling level.*
- Close all railcar discharge valves, ESVs and transfer hose-end valves
- Vent the propane trapped between valves, stubs, and hose couplings. When the connections reach atmospheric pressure, disconnect the transfer hose. **Caution:** Never disconnect any hose until the propane trapped in the connection safely bleeds off.
- Remove the railcar loading nipples, or “stubs” that are screwed into the railcar valve outlets
- Obtain a sample of the railcar product if required by company policy and procedures
- Replace all railcar valve openings with appropriate plugs and ensure they are wrench-tight.
- Explain significant company violations/fines for loose caps or plugs
- Replace and secure all covers over fittings
- Replace and secure the dome cover and seal
- Return all tools to their proper place
- Verify all necessary placards are in place and in good condition

Satisfactory

* **Not Applicable**

**Not Applicable means that the person's job description does not require the person to perform this task or the company does not load railcars.*

Task 3: Identify Railcar Releasing Procedures

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

After the railcar is loaded and properly secured for transport, complete the following tasks before the railcar is released:

1. Place the proper seal on the dome to prevent tampering while the railcar is in route.
2. Complete and turn in the bill of lading, seal number, railcar release information and any other paperwork required by the railroad and/or company policy.
3. Stow all transfer hoses and fittings and return the unloading riser platform to its stored position.
4. Remove and store the warning signs and chock blocks, and reset the derailer or other control device(s).
6. **Note: DO NOT release the hand brake on the railcar. This will be done by railroad personnel when the railcar is picked up.**
5. Verify that all placards are in place and in good condition.
6. Walk around the railcar and the loading site to ensure everything is safe and secure.

Satisfactory

* **Not Applicable**

**Not Applicable means that the person's job description does not require the person to perform this task or the company does not load railcars.*

Section Seven: Identify Railcar Area Security Training and Emergency Procedures

Task 1: Identify Railcar Area Security Measures

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Explain company policies and procedures as they relate to the following security plan measures for the transfer site/bulk plant:
 - Personnel security
 - Unauthorized access
 - In route security

Satisfactory

Task 2: Identify Safety Features on Railcars Designed to Help Prevent Emergencies

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Identify the following railcar design and construction features that can help prevent emergencies:
 - Head shields
 - Shelf Couplers
 - Thermal Protection

Satisfactory

Task 3: Explain Company Policies and Procedures Related to an Uncontrolled Release of Propane

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

Evaluator: For purposes of this task, an “Uncontrolled Release of Propane” is one that cannot be readily shut off.

1. Provide examples of an uncontrolled release of propane, and the types of emergency situations they can lead to.
2. Explain what is meant by “being aware of surroundings” during evacuations for an uncontrolled release of propane.
3. Correctly explain company policies and procedures for evacuating an area in the event of an uncontrolled release of propane.
4. Correctly explain company policies and procedures related to emergency responders, as applicable

Satisfactory

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CETP Certification Performance Evaluation / Candidate Record (3.6) 2019

Completing your NPGA CETP Certification:

- 1: Successfully pass the exam.
- 2: Complete and return the *CETP Performance Evaluation / Employee Record* to the testing center below within 12 months of passing the exam.
- 3: Complete any necessary prerequisites within 12 months of passing the exam.

Make a copy for your training records and then send the original to:

Industrial Training Services, Inc.

120 Max Hurt Drive ● Murray, KY 42071 ● PH: 270-753-2150 ext. 2 ● EMAIL: skills@its-training.com

The information requested below will be used to assist in locating your records in the CETP database.
Please make sure to complete all requested information; we thank you in advance for your assistance.

Candidate Information: (print or type) Test Group Number (if known): _____

Name: _____ Last four digits of SSN (only): _____

Employer: _____ Email: _____

Address: _____ Daytime Phone#: _____

City, State: _____ Zip Code: _____

Affidavit

I affirm that I am the person who has performed those items checked on this checklist. I acknowledge that the performance checklists used are solely for the purpose of skills assessment for the CETP Certification requirements, and are not intended to replace or modify company operating or safety procedures, and may not be appropriate for use in all circumstances. I acknowledge that I am responsible for recognizing hazards and abnormal conditions in my workplace and must exercise care and good judgment, always using appropriate equipment, procedures and tools for the tasks I perform. The Propane Education and Research Council, the National Propane Gas Association and Industrial Training Services, Inc. assume no liability for my actions, or for my application of the skills assessment performance guides used in this evaluation checklist.

Candidate Signature _____ **Date** _____

Skills Evaluator Information: (print or type)

Name: _____

Organization/Employer: _____

Affidavit

I affirm that I am the person who has administered this checklist, and that I have conducted this Performance-Based Skills Assessment Evaluation with integrity. I also affirm that the above named Candidate is the person whose performance I evaluated, and that the above named person performed the checked tasks at the indicated level without assistance from me or any other person.

Skill Evaluator's Signature _____ **Date** _____

Registered Skills Evaluator Number * _____

Final Checklist for: 3.6 Perform Railcar Product Transfers (2019)

Name: _____ Last four digits of SSN (only): _____

The candidate has been evaluated on the following tasks at the following level:

(The N/A option is available only as listed in the Not Applicable column/available box(s) below. All other tasks must be completed.)

Satisfactory	Not Applicable	Section One: Identify Personal Protective Equipment (PPE) and Hazards Associated with Propane Transfer Operations
<input type="checkbox"/>		Identify Personal Protective Equipment (PPE) and Hazards Associated with Propane Transfer Operations
Section Two: Verify Railcar Spotting Procedures and Documentation and Determine Railcar Condition Prior to Accepting Delivery		
<input type="checkbox"/>		Verify Railcar Spotting Procedures
<input type="checkbox"/>		Verify Railcar Documentation
<input type="checkbox"/>		Determine Railcar Condition Prior to Accepting Delivery
Section Three: Verify the Presence of Odorant		
<input type="checkbox"/>		Perform a Sniff Test to Verify the Presence of Propane Odorant
Section Four: Identify Bulk Plant Railcar Unloading and Loading Systems		
<input type="checkbox"/>		Identify Equipment Used to Transfer Liquid by Differential Pressure
<input type="checkbox"/>		Identify Emergency equipment and Procedures
Section Five: Unload the Railcar		
<input type="checkbox"/>		Prepare the Railcar for Unloading
<input type="checkbox"/>		Unload the Railcar
<input type="checkbox"/>		Prepare the Railcar for Return
<input type="checkbox"/>	<input type="checkbox"/>	Prepare Post Unloading and Releasing Procedures
Section Six: Load the Railcar		
<input type="checkbox"/>	<input type="checkbox"/>	Prepare to Load the Railcar
<input type="checkbox"/>	<input type="checkbox"/>	Load the Railcar
<input type="checkbox"/>	<input type="checkbox"/>	Identify Railcar Releasing Procedures
Section Seven: Identify Railcar Area Security Training and Emergency Procedures		
<input type="checkbox"/>		Identify Railcar Security Procedures
<input type="checkbox"/>		Identify Safety Features on Railcars Designed to Help Prevent Emergencies
<input type="checkbox"/>		Explain Company Policies and Procedures Related to an Uncontrolled Release of Propane

Make a copy for your training records and then send to:

Industrial Training Services, Inc.

120 Max Hurt Drive • Murray, KY 42071 • PH: 270-753-2150 ext. 2 • EMAIL: skills@its-training.com